

Amendments to the Specification:

Please replace the paragraph (or section) beginning at page 1, line 36, with the following redlined paragraph (or section):

Microparticles are usually used as the solid phase to bind various biomolecules, cell organelles, bacteria or cells. For example, enzymes can be immobilized on the surface of microparticles, whereby the treatment and further use of the enzymes is efficient. Most of the so called magnetic nanoparticles (<50 nm) are not suitable to be treated with regular permanent magnets or electrical magnets, but require the use of an particularly strong magnetic gradient, as described in EP 0842704 (Miltenyi Biotec). Magnetic particles, such as microparticles, that have a diameter of about 0.1 μm or more, can usually be treated with regular permanent or electrical magnets. The viscosity of the solution can also considerably hamper the picking of the particles. The particles to be picked can be originally suspended in the solution, where a substance is desired to be bound, or, say, cells on the surface of the microparticles

Please replace the paragraph (or section) beginning at page 3, line 11, with the following redlined paragraph (or section):

U.S. Pat. No. 3,985,649 (Eddelman), U.S. Pat. No. 4,272,510 (Smith et al.), U.S. Pat. No. 4,649,116 (Daty et al.), U.S. Pat. No. 4,751,053 (Dodin et al.) and U.S. Pat. No. 5,567,326 (Ekenberg et al.) describe solutions, wherein magnetisable material is collected directly from the solution with a magnet in each of them. It is also common for these publications that the magnets are not protected with separate plastic shields. These solutions also require washing of the tip of the magnet before treating the next sample to eliminate the risk of contamination and the carry-over effect of ~~impurities~~impurities.

Please replace the paragraph (or section) beginning at page 10, line 30, with the following redlined paragraph (or section):

The invention presents that by designing the ~~the~~ form of the outer surface of the plastic shield or the elastomer in a particular manner sufficient support is achieved to collect the mass of microparticles to be collected around the shield in a preferable and reliable manner. The

term particular design of form refers to, for example, grooves, cavities and/or protuberances of different sizes and depths. When gathering between these formations, the pellet of microparticles gets particular support from the shield, while the magnet unit is moved against liquid currents. The effect produced by viscose samples is very significant, which means at worst, that microparticles do not stay attached to one side of the shield, but stay in solution. The above-described form has naturally a great benefit to the collecting reliability, when handling large volumes.

Please replace the paragraph (or section) beginning at page 11, line 20, with the following redlined paragraph (or section):

The microparticles may contain affinity ligands, enzymes, antibodies, bacteria, cells or cell organelles. Binding of the desired components can also be brought about by choosing the surface properties of the microparticles to be used and the composition of the buffers in an appropriate, preferable manner in order to bind the desired components from the samples. Examples include ion exchange, ~~hydrofobic~~hydrophobic and reverse phase chromatography. Then, for example, binding and releasing of proteins from the surface of the microparticles is performed by means of appropriately chosen buffers and solutions. For example, salt content and pH value are then very important factors.

Please replace the paragraph (or section) beginning at page 18, line 4, with the following redlined paragraph (or section):

By means of the device and the method described in the invention, for example, ion exchange chromatography, reverse phase chromatography, ~~hydrofobic~~hydrophobic chromatography and affinity chromatographic purifications can be made. Also gel filtration can be accomplished with the described device, but it requires performing the gel filtration in a column and thereafter collecting the microparticles by means of a device according to the invention and outflow of the proteins to a small volume. The method enables, for example, removing salt from samples without largely increasing the volume compared to classical gel filtration columns.

Please replace the paragraph (or section) beginning at page 20, line 7, with the following redlined paragraph (or section):

5' labelling (e.g. T4 Polynucleotide Kinase), 3' addition (e.g. T4 RNA Ligase), 3' fill-in (e.g. Klenow Fragment DNA Polymerase I, T4 DNA Polymerase), 3' exchange (e.g. T4 DNA Polymerase, heat stable polymerases), nick translation (e.g. E. coli DNA Polymerase I, heat stable polymerases), replacement synthesis (e.g. T4 DNA Polymerase, heat stable polymerases, Exo III Nuclease), random priming (e.g. Klenow Fragment DNA Polymerase I, heat stable polymerases) ~~ja~~and RNA probes (e.g. T7 RNA Polymerase, SP6 RNA Polymerase).

Please replace the paragraph (or section) beginning at page 20, line 15, with the following redlined paragraph (or section):

Sequencing of DNA (e.g. E. coli DNA Polymerase I, Klenow Fragment DNA Polymerase I, heat stable polymerases) and Sequencing of RNA (~~esime~~e.g. Reverse Transcriptase, heat stable Reverse Transcriptases).

Please replace the paragraph (or section) beginning at page 21, line 6, with the following redlined paragraph (or section):

The method described for culturing and isolating cells may be broadly utilized. Cells of interest include, for example, stem cells, B lymphocytes, T lymphocytes, endothelial cells, granulocytes, Langerhans cells, leucocytes, monocytes, ~~macrofages~~macrophages, myeloid cells, natural killer cells, reticulocytes, trophoblasts, cancer cells, transfected cells and hybridoma cells. Commonly known methods, such as, for example, a direct or indirect isolation method, may be used in isolation of cells. In the first one, the direct isolation method, the desired cells are separated by binding them to the surface of microparticles by utilising, for example, specific antibodies. In the indirect method, not the desired cells, but all the other cells are bound to the microparticles. The desired cells stay in this case in the solution.

Please replace the paragraph (or section) beginning at page 26, line 17, with the following redlined paragraph (or section):

In FIG. 15 the microparticles 22 are collected from the vessel 76 including a filter by bringing the magnet 13 of the magnet unit 10 out of the ferromagnetic sleeve 12 and by stretching the elastomer protective membrane 21 in an appropriate manner. In FIG. 16 the magnet unit 10 is lifted from the vessel 76 including a filter. The backward-and-forward stretching of the protective membrane 21 brought about by means of the ferromagnetic sleeve 12 and the collecting of microparticles 22 by means of the magnet 13 may also be appropriately done in turns, in case very efficient mixing properties are desired to be brought about. In FIG. 17 the removing of the solution from the vessel 76 through the filter 77 on its bottom via the channel 85 joined to the bottom of the vessel 76 by means of an aspiration/vacuum unit, which unit is not presented in the figure, is presented.